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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Steven P. Jones

Serial No.: 09/903,177

Filed: July 11, 2001

For: METHOD AND APPARATUS TO VARY FUEL PRICES FOR
VEHICLES BASED ON ENVIRONMENTAL AND
CONSERVATION CONSIDERATIONS

Group Art Unit: 3629

Confirmation No.: 9365

Assistant Commissioner for Patents
Washington, DC 20231

REPLY BRIEF IN SUPPORT OF APPEAL

FROM THE PRIMARY EXAMINER TO THE BOARD OF APPEALS

Sir:

Applicant herewith submits a reply brief under 37 CFR §41.41 in support of the appeal to the Board of Appeals in response to the Examiner's Answer dated December 20, 2005.

Applicant believes that no fee is required, however, if a fee is required, it should be charged to Deposit Account No. 09-0465.

Docket No.: ROC920010100US1
Serial No.: 09/903,177

The Examiner contends throughout his Office Actions and Examiner's Answer that Applicant's term, "vehicle specific data" can mean almost anything. Applicant strongly disagrees. Applicant, per the responses to Office Actions and in the original Reply Brief believes that, by many examples, Applicant has very adequately defined "vehicle specific data" through examples as data that specifies a category that the vehicle containing the vehicle specific data belongs to. Applicant is allowed to, as stated in MPEP 608.01(o), define his use of a word, and Applicant respectfully submits he has done so by example, and believes Applicant's use of "vehicle specific data" is correct. Accordingly, when read in the light of the specification, "vehicle specific data" has a well defined meaning.

The Examiner, on pages 7,8,9 of the Examiner's answer, cites a number of dictionary entries for "specific". Applicant notes that a reading of Examiner's dictionary citations reveals that "specific" specifies, in all contexts relevant to Applicant's specification, pertains to categorization.

In the Examiner's Answer, the Examiner cites from Dictionary.com regarding "specific", which, "explicitly set forth; definite". See Synonyms at explicit. Clicking on "explicit" results in: 1(a) "fully and clearly expressed; leaving nothing implied. 1(b) fully and clearly defined or formulated: 'generalizations that are powerful, precise, and explicit' (Frederick Turner)". Certainly, Applicant's "vehicle specific data" is a generalization that is powerful, precise, and explicit" to identify to which category a particular vehicle belongs. The second item in Examiner's dictionary.com citation is "Relating to, characterizing, or distinguishing a species". This is exactly the use that Applicant has defined through many examples. Item 3 in Examiner's dictionary.com citation is "Special, distinctive, or unique: specific qualities and attributes". Applicant submits that "vehicle specific data" provides a special, distinctive or unique characterization of a vehicle into a category. Item 4 in the Examiner's dictionary.com

citation states: "4(a) intended for, or acting on a particular thing: a specific remedy for warts" and "4(b) concerned particularly with the subject specified. Often used in combination: 'age-specific voting patterns" (A. Dianne Schidley)." It will be noted that "age-specific" in the example refers to a category (pattern); for example, one could categorize people of age 65 as being eligible for social security. Item 5 in the Examiner's dictionary.com citation states "5(a) designating a disease produced by a particular microorganism or condition". That is, any diabetic in the "type-1" category will require insulin. Dictionary.com continues, "5(b) having a remedial influence on a particular disease" would certainly classify insulin as a medication being vital to a "type-1" diabetic. Examiner's Item 6 of dictionary.com citation states: "immunology. Having an affinity limited to a particular antibody or antigen". Again, this definition pertains to categories by antibody or antigen. Examiner's Item 7 of the dictionary.com citation states: "7(a) designating a customs charge levied on merchandise by unit or weight rather than according to value." This is exactly one of Applicant's examples - that is, categorize a vehicle by "vehicle specific data" wherein the vehicle specific data is weight, and determining fuel price accordingly. "7(b) designating a commodity rate applicable to the transportation of a single commodity between named points". Although the Examiner did not particularly single out 7(b) in support of his argument that "vehicle specific data" could mean anything, 7(b) is the only definition from dictionary.com that is even remotely applicable to the Examiner's position. For the same of argument, 7(b) does discuss designating a commodity rate (fuel price). However, the commodity (fuel) is not transported between named points (e.g., two cities). In stark contrast, the fuel paid for has in fact been consumed and therefore has not been transported. Therefore, Applicant respectfully submits that NONE of the definitions from dictionary.com cited by the examiner supports the Examiner's contention that the term "vehicle specific data" as defined through example in Applicant's specification could reasonably be read as other

than how Applicant has defined it in the application. Dictionary.com supports the Applicant's claim allowability, not the Examiner's rejection.

The Examiner further cites from Merriam Webster Online Dictionary. Item 1(a) states: "constituting or falling into a specifiable category" which is exactly as defined by example in Applicant's specification. 1(b) states "sharing or being those properties of something that allow it to be referred to a particular category". Again, exactly as defined by example in Applicant's specification, 2(a) states: "restricted to a particular situation, relation, or effect <a disease specific to horses>". Again, this pertains to a disease that affects animals in the category "horses". 2(b) states: "exerting a distinctive influence (as on a body part or a disease) <specific antibodies>". Clearly the specific antibodies pertain to a particular category of disease. For example, the anti-GAD antibody is associated with breast, colon, and small cell lung carcinoma. Item 3 in the citation states: "free from ambiguity: ACCURATE <a specific statement of faith>". Item 3 then, would, for the example, describe adherence to the Ten Commandments as categorizing one into the faiths that believe in the Ten Commandments. Item 4 of the Examiner's citation states: "of, relating to, or constituting a species and especially a biologic species". Again, this totally supports the Applicant's argument, not the Examiner's argument. Item 5(a) states: "being any of various arbitrary physical constants and especially one relating a quantitative attribute to unit mass, volume, or area." Relating to physical constants such as mass, volume, or area support Applicant's argument, as these are (or can be) used to categorize a vehicle, that category determining a fuel price. Weight (proportional to mass at a given elevation) was in particular used as an example by the Applicant's specification. 5(b) states "Imposed at a fixed rate per unit (as of weight or count) <specific import duties>". Again, items falling into a category are taxed based on that category.

Applicant respectfully submits that all of the Examiner's dictionary citations

support the Applicant's use of "vehicle specific data" as categorizing a particular vehicle based on some characteristic as taught in Applicant's specification. Applicant further respectfully submits that none of the Examiner's dictionary citations clearly supports the Examiner, but, rather reinforce the compelling argument Applicant makes for the allowability of Applicant's claims.

The Examiner continues to allege that an odometer reading is "vehicle specific data". Applicant has respectfully counter argued in responses to Office Actions and his Appeal Brief that odometer readings between two points are completely detached from ANY categorization characteristic, and that any object that measures distance will log the same distance over the same course, from a walker's pedometer to an odometer on a bicycle, to an odometer on a semi-trailer truck. Applicant therefore respectfully submits that the Examiner's suggestion that an odometer reading is "vehicle specific data" in light of Applicant's specification - or even Examiner's dictionary citations - is utterly non-persuasive and should be rejected. Applicant respectfully submits that the 102 rejection based on the article "Minnesota Representative Proposes Mileage Tax to Replace Gas Tax" is improper and should be reversed.

The Examiner on page 4 of the Examiner's Answer attempts to justify his rejection of claims 22,28-33 under 35 U.S.C. 102(b) as being anticipated by Walkey et al. (4469149). In Walkey, the pump does NOT determine the price of fuel based on "vehicle specific data". In stark contrast, the CUSTOMER must select a fuel grade suitable for his/her vehicle. In Walkey, the pump simply refuses to pump fuels that are inappropriate for the vehicle being fueled. As pointed out in a response to an Office Action, an analogous non-persuasive argument could be made that a fuel pump nozzle used with leaded gasoline determines the per-unit price of fuel because such nozzle does not fit in the filler spout of a vehicle requiring unleaded gasoline. Applicant respectfully submits that the Examiner's 102(b) rejection under Walkey is improper and should be reversed.

The Examiner on page 4 of the Examiner's Answer attempts to justify his rejection of claims 22, 33-35 under 35 U.S.C. 102(e) as being anticipated by Marion (2002/0046117). The Examiner states: "Marion discloses a system where a transponder in a vehicle can communicate wirelessly with a fuel pump to transmit data indicating how much fuel is in the tank and the fuel pump has a computer that will determine how much it will cost to fill up the tank." As argued in responses to Office Actions and in his Reply Brief, Applicant pointed out that it is completely unreasonable to allege that a measurement of unused space in a fuel tank of a vehicle is somehow "vehicle specific data". A measurement of unused space in a fuel tank does not serve to categorize a vehicle into any category. For example, Buick LeSabres 2000-2004 have a 17.5 gallon fuel tank. The LeSabre could be refueled with, for example, 0.1 gallon of fuel or 17.5 gallons of fuel. That is, the tank may have only 0.1 gallons of "empty space" or a full 17.5 gallons of "empty space" and therefore any measure of empty space has no ability to categorize the LeSabre into a meaningful category. Applicant therefore submits that the rejection of claims 22, 33-35 is improper and requests these rejections be reversed.

The Examiner alleges, on page 6 of the Examiner's Answer that "The disclosure of 'or other factors that may be deemed relevant to fuel prices by a regulatory agency' on page 7 of the specification is evidence that the term 'vehicle specific data' is not limited to the definition being argued by Applicant, but is actually a broader term that (sic) has been argued." Applicant respectfully continues to disagree. ALL of Applicant's examples defining "vehicle specific data" have been directed to categorization of a vehicle by "vehicle specific data" stored in the vehicle. Applicant therefore submits that Applicant has a well defined meaning of "vehicle specific data". The Examiner's dictionary citations, as discussed above, support the Applicant. The Examiner somehow reading that "or other factors..." could mean something orthogonal to the teachings of the specification or the Examiner's own citations is non-persuasive. The Examiner has even

copied, on page 6, many examples of “factors” that Applicant considers as “vehicle specific data” that categorize a vehicle. And, yes... Applicant does intend to include other factors that would identify a vehicle as belonging to a category that would determine fuel price eligibility.

The Examiner argues, toward the bottom of page 6 of the Examiner's Answer “With respect to the argument that the term specific means a category of vehicle, what about the embodiment where the gas mileage is the vehicle specific data? It is entirely possible that a sedan type of vehicle could have the same gas mileage as a truck, and they would not reasonably be considered as falling into the same category of vehicle. One of ordinary skill in the art would not reasonably consider a sedan type of vehicle such as a Honda TM, to be in the same class or category as a truck like an F-150 Ford TM truck.” Applicant respectfully submits that the Examiner's argument clearly demonstrates that the Examiner does not understand categorization by EPA mileage. There is NO reason whatsoever that a sedan and a truck having the same mileage could not be in the same category. On page 2 of Applicant's specification, Applicant stated: “For example, such factors could include U.S. Environmental Protection Agency (EPA) gas mileage of the vehicle, weight of the vehicle...” Applicant did not state, suggest, or even hint that a sedan and a truck could NOT be in the same category, e.g., a category having the same EPA gas mileage, if they share the same EPA gas mileage. In fact, categorization of various vehicles sharing a similar characteristic (EPA gas mileage, in this case) is exactly what IS taught in Applicant's specification.

The Examiner continues on page 7 of the Examiner's Reply, “Additionally the weight of the vehicle does not define a category of vehicle. A small truck and a sports car can have the same weight but they would not reasonably be considered as falling into the same category of vehicle.” Again, Applicant respectfully submits that the Examiner has exposed his lack of understanding of the invention. As cited in the previous paragraph,

vehicle weight is clearly a candidate vehicle specific data category, and Applicant did not state, suggest, or even hint that sports cars and light trucks having the same weight could not share the same weight category if they are of the same weight. In fact, categorization of various vehicles sharing a similar characteristic (weight, in this case) is exactly what IS taught in Applicant's specification.

Applicant notes that the Examiner has, in paragraph 11 on page 5 of the Examiner's Reply, withdrawn his 35 USC 101 rejection.

In paragraph 6 of page 2 of the Examiner's Reply, the Examiner notes and confirms that Applicant has chosen to not appeal the 103 rejections contained in the Final rejection. Applicant agrees that Applicant has chosen not to appeal the 103 rejections. Applicant notes that none of the independent claims were rejected under 35 USC 103, and for reasons given in responses to Office Actions, the Appeal Brief, and this paper, Applicant respectfully submits that all independent claims, and therefore all dependent claims, are allowable.

8. Claims Appendix

1. (Original) A method for selling fuel to a vehicle, wherein the method comprises the steps of:
 - storing vehicle specific data in the vehicle;
 - transmitting said data from the vehicle to a fuel pump computer; and
 - determining, at least partially, by said fuel pump computer, a per unit price of the fuel sold to said vehicle, using said data.
2. (Original) The method of claim 1, wherein the data comprises a value indicative of how far the vehicle is capable of going on a unit of fuel.
3. (Original) The method of claim 1, wherein the data comprises a value indicative of the weight of the vehicle.
4. (Original) The method of claim 1, wherein the data comprises a value indicative of the amount of at least one chemical composition emitted by the vehicle.
5. (Original) The method of claim 1, wherein the data comprises a vehicle identification number.
6. (Original) The method of claim 1, wherein the data comprises an indicator that the vehicle is capable of using fuel which is at least partially comprised of a renewable resource.
7. (Original) The method of claim 1, wherein the data comprises an indicator that the vehicle is a hybrid gasoline/electric vehicle.

8. (Original) The method of claim 1, wherein the step of determining a per unit price of fuel sold to said vehicle further comprises searching a lookup table for vehicle specific data in order to determine a per unit price for fuel for the vehicle.

9. (Original) The method of claim 1, wherein the step of determining a per unit price of fuel sold to said vehicle further comprises use of an equation which utilizes said vehicle specific data to at least partially determine the per unit price for the fuel sold to the vehicle.

10. (Original) The method of claim 1, wherein the step of determining a per unit price of fuel sold to said vehicle further comprises the use of a database query which utilizes said vehicle specific data to at least partially determine the per unit price for the fuel sold to the vehicle.

11. (Original) The method of claim 1, wherein the step of transmitting said data uses wireless means.

12. (Original) The method of claim 11, further comprising a step of periodically verifying that the fuel being delivered is being pumped into the vehicle from which the vehicle specific data was used to determine the per unit price.

13. (Original) The method of claim 12, further comprising a step wherein a computer in the vehicle receives information on fuel level in a fuel tank in the vehicle and periodically transmits said fuel level or a rate of change of said fuel level to the fuel pump computer; said fuel pump computer using said transmitted fuel level or said rate of change of fuel

level to verify that the per unit price is correct for the vehicle being fueled.

14. (Original) The method of claim 1, wherein the step of transmitting said data from the vehicle is by means of an electrical coupling comprising a signaling cable, a plug at an end of the signaling cable, and a jack on the vehicle to be fueled; said jack being electrically coupled to a device containing said data in the vehicle.

15. (Original) The method of claim 1, wherein the step of transmitting said data from the vehicle is by means of a magnetic transducer placed on a portion of a nozzle which is inserted into a fuel filler pipe on the vehicle; said magnetic transducer reading the vehicle data from one or more encoded magnetic strips situated in a portion of the fuel filler pipe through which the magnetic transducer passes; and wherein said data received by the fuel pump computer travels over a signaling cable between said magnetic transducer and said fuel pump computer.

16. (Original) The method of claim 15, further comprising a step wherein if fueling is suspended for a predetermined time, said nozzle must be reinserted past said encoded magnetic strips in order to resume receiving fuel at the determined per unit price.

17. (Original) The method of claim 1, wherein the step of transmitting said data from the vehicle is done by optically reading a bar code; said bar code being physically located inside the fuel filler pipe and read by a light source and a light receptor on the fuel nozzle; and wherein said data travels via a signaling cable between said light receptor and said fuel pump computer.

18. (Original) The method of claim 1, wherein the step of transmitting said data from said

vehicle is by means of infrared data transmission sent from a sending unit on the vehicle to a receiving unit on the fuel nozzle.

19. (Original) The method of claim 1, further comprising the step of displaying to the customer the per unit fuel price.

20. (Original) The method of claim 19, further comprising the step of displaying an explanation of how the per unit fuel price was determined.

21. (Original) The method of claim 1, wherein the step of storing said vehicle specific data is performed under the direction of a regulatory agency after the vehicle has been purchased by the customer.

22. (Original) An apparatus for selling fuel to a vehicle, comprising:
 a storage device for storing vehicle specific data within said vehicle;
 a transmitter for transmitting said data to a fuel vendor; and
 a fuel pump computer, which determines a per unit price for the fuel,
 using, at least in part, said data.

23. (Original) The apparatus of claim 22, wherein the storage device is a semiconductor memory.

24. (Original) The apparatus of claim 22, wherein the storage device is comprised of magnetic material.

25. (Original) The apparatus of claim 24, wherein the magnetic material is positioned

inside a fuel filler pipe on said vehicle, and is of a substantially cylindrical or partially cylindrical shape.

26. (Original) The apparatus of claim 25, further comprising a substantially cylindrical or partially cylindrical collar positioned and affixed between said magnetic material and the inside wall of said fuel filler pipe; said collar being made of a nonferrous material and of suitable thickness to prevent shunting of magnetic fields of said magnetic material by said fuel filler pipe.

27. (Original) The apparatus of claim 26, further comprising a magnetic transducer affixed to a fuel nozzle; said transducer capable of reading information encoded upon said magnetic material as said nozzle is inserted into said fuel filler pipe and past the magnetic material.

28. (Original) The apparatus of claim 22, wherein the storage device is an optically readable bar code.

29. (Original) The apparatus of claim 28, wherein the bar code is printed, engraved, or painted on the inside wall of a fuel filler pipe on said vehicle.

30. (Original) The apparatus of claim 29, further comprising a light source and a light receptor on a fuel nozzle; said light source capable of illuminating said bar code, and said receptor capable of detecting and reading said bar code as said nozzle passes the bar code as said nozzle is inserted into said fuel filler pipe.

31. (Original) The apparatus of claim 28, wherein the bar code is printed, engraved, or

painted on a substantially cylindrical or partially cylindrical collar which is positioned and affixed inside a fuel filler pipe on said vehicle.

32. (Original) The apparatus of claim 31, further comprising a light source and a light receptor on a fuel nozzle; said light source capable of illuminating said bar code, and said receptor capable of detecting and reading said bar code as said nozzle passes the bar code as said nozzle is inserted into said fuel filler pipe.

33. (Original) The apparatus of claim 22, wherein said transmitter is wireless.

34. (Original) The apparatus of claim 33, further comprising a fuel sensor in the vehicle; a computer in the vehicle which is electrically coupled to and which periodically reads fuel quantity information from said fuel sensor; said computer in the vehicle further being coupled to a wireless interface unit which controls a first wireless unit in said vehicle; said first wireless unit being in communication with a second wireless unit on a fuel pump; said second wireless unit being electrically coupled to said fuel pump computer; said fuel quantity information transmitted from said computer in the vehicle through said wireless interface unit to said first wireless unit, and from said first wireless unit to said second wireless unit, and from said second wireless unit to said fuel pump computer.

35. (Original) The apparatus of claim 22, wherein the transmitter comprises an infrared transmitter on said vehicle and an infrared receptor attached to a fuel pump nozzle.

36. (Original) The apparatus of claim 22, wherein said fuel pump computer contains a program in a memory; said program, when executed by said fuel pump computer, being

capable of determining a per unit price of fuel sold to the vehicle, using some or all of said vehicle specific data, and at least one rule authorized by a regulatory agency.

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